

Appl. No. 10/707,244  
Amdt. dated May 22, 2006  
Reply to Office action of March 03, 2006

**Listing of Claims:**

1. (original): An optical proximity correction (OPC) method for correcting a photomask layout, wherein the photomask layout comprises at least a photomask pattern, the  
5 OPC method comprising:  
collecting an assist feature bias of a predetermined first assist feature which will be added to the photomask layout;  
performing a rule-based OPC process by taking account of the assist feature bias to compute a target bias of the photomask layout and output a corrected photomask  
10 layout according to the target bias; and  
adding the first assist feature to the corrected photomask layout.
2. (original): The OPC method of claim 1, wherein the first assist feature is a scattering  
15 bar.
3. (original): The OPC method of claim 1, further comprising using the collected assist feature bias to build an assist feature correction model for the rule-based OPC process.
- 20 4. (original): The OPC method of claim 1, further comprising transferring the collected assist feature bias to a specific format for the ruled-based OPC process.
5. (original): The OPC method of claim 1, wherein the rule-based OPC process is used for correcting an edge portion of the photomask pattern.
- 25 6. (original): The OPC method of claim 1, wherein the rule-based OPC process comprises:  
collecting a width and a spacing of the photomask pattern to obtain a parameter of the

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photomask pattern; and  
adding a second assist feature using a correction rule of a database according to the  
parameter of the photomask pattern.

- 5 7. (original): The OPC method of claim 6, wherein the second assist feature is a serif or  
a hammerhead pattern.

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